Claim Amendments

Please cancel claims 7 and 11 and amend claims 2, 8, and 9 as follows.

1. (original) A zoom lens comprising, in order from an enlarging side along an optical axis:

a first lens group having negative refractive power that is movable for focusing and that is stationary during zooming;

a second lens group having positive refractive power that moves during zooming;

a third lens group having negative refractive power that moves during zooming;

a fourth lens group having negative refractive power that moves during zooming; and

a fifth lens group having positive refractive power that is stationary during zooming;

wherein

the second lens group, said third lens group, and said fourth lens group move relative to one another along the optical axis of the zoom lens during zooming,

the second lens group moves toward the enlarging side during zooming from the wide-angle end to the telephoto end, and

the fourth lens group is positioned nearer the reducing side when at the telephoto end than when at the wide-angle end.

2. (original) The zoom lens of claim 1, wherein the following conditions are satisfied:

$-2.2 < F1 / F < -1.2$

$0.6 < F2 / F < 1.1$

$-15.0 < F4 / F < -1.5$

$0.7 < F5 / F < 1.2$

where

F1 is the focal length of the first lens group,

F2 is the focal length of the second lens group,

F4 is the focal length of the fourth lens group,

F5 is the focal length of the fifth lens group, and

F is the focal length of the zoom lens at the wide-angle end when the zoom lens is focused at infinity on the enlarging side.

3. (original) A projection display device comprising:

the zoom lens of claim 1;

a light source on the reducing side of the zoom lens; and

a light modulator positioned between the light source and the zoom lens for modulating light from the light source with image information;

wherein

the zoom lens projects the modulated light so as to form an enlarged image on the enlarging side of the zoom lens.

4. (original) A projection display device comprising:

the zoom lens of claim 2;

a light source on the reducing side of the zoom lens; and

a light modulator positioned between the light source and the zoom lens for modulating light from the light source with image information;

wherein

the zoom lens projects the modulated light so as to form an enlarged image on the enlarging side of the zoom lens.

5. (original) A zoom lens comprising, in order from an enlarging side along an optical axis:

a first lens group having negative refractive power that is movable for focusing and that is stationary during zooming;

a second lens group having positive refractive power that moves during zooming;

a third lens group having negative refractive power that moves during zooming;

a fourth lens group having negative refractive power that moves during zooming; and

a fifth lens group having positive refractive power that is stationary during zooming;

wherein

the second lens group, said third lens group, and said fourth lens group move relative to one another along the optical axis of the zoom lens during zooming, and

the following conditions are satisfied:

$$-2.2 < F1 / F < -1.2$$

$$0.6 < F2 / F < 1.1$$

$$-15.0 < F4 / F < -1.5$$

$$0.7 < F5 / F < 1.2$$

where

F1 is the focal length of the first lens group,

F2 is the focal length of the second lens group,

F4 is the focal length of the fourth lens group,

F5 is the focal length of the fifth lens group, and

F is the focal length of the zoom lens at the wide-angle end when the zoom lens is focused at infinity on the enlarging side.

6. (original) A projection display device comprising:

the zoom lens of claim 5;

a light source on the reducing side of the zoom lens; and

a light modulator positioned between the light source and the zoom lens for modulating light from the light source with image information;

wherein

the zoom lens projects the modulated light so as to form an enlarged image on the enlarging side of the zoom lens.

7. (canceled)

8. (currently amended) ~~The zoom lens of claim 7, wherein~~ A zoom lens formed of only five lens groups, arranged in order from an enlarging side along an optical axis:

a first lens group having negative refractive power that is movable for focusing and that is stationary during zooming;

a second lens group having positive refractive power that moves during zooming;

a third lens group having negative refractive power that moves during zooming;

a fourth lens group having negative refractive power that moves during zooming; and

a fifth lens group having positive refractive power that is stationary during zooming;

wherein:

the second lens group, said third lens group, and said fourth lens group move relative to one another along the optical axis of the zoom lens during zooming,

the second lens group moves toward the enlarging side during zooming from the wide-angle end to the telephoto end, and

the fourth lens group is positioned nearer the reducing side when at the telephoto end than when at the wide-angle end.

9. (currently amended) ~~The zoom lens of claim 7, wherein~~ A zoom lens formed of only five lens groups, arranged in order from an enlarging side along an optical axis:

a first lens group having negative refractive power that is movable for focusing and that is stationary during zooming;

a second lens group having positive refractive power that moves during zooming;

a third lens group having negative refractive power that moves during zooming;

a fourth lens group having negative refractive power that moves during zooming; and

a fifth lens group having positive refractive power that is stationary during zooming;

wherein:

the second lens group, said third lens group, and said fourth lens group move relative to one another along the optical axis of the zoom lens during zooming, and

the following conditions are satisfied:

$$-2.2 < F1 / F < -1.2$$

$$0.6 < F2 / F < 1.1$$

$$-15.0 < F4 / F < -1.5$$

$$0.7 < F5 / F < 1.2$$

where

F1 is the focal length of the first lens group,

F2 is the focal length of the second lens group,

F4 is the focal length of the fourth lens group,

F5 is the focal length of the fifth lens group, and

F is the focal length of the zoom lens at the wide-angle end when the zoom lens is focused at infinity on the enlarging side.

10. (original) The zoom lens of claim 8, wherein the following conditions are satisfied:

$$-2.2 < F1 / F < -1.2$$

$$0.6 < F2 / F < 1.1$$

$$-15.0 < F4 / F < -1.5$$

$$0.7 < F5 / F < 1.2$$

where

F1 is the focal length of the first lens group,

F2 is the focal length of the second lens group,

F4 is the focal length of the fourth lens group,

F5 is the focal length of the fifth lens group, and

F is the focal length of the zoom lens at the wide-angle end when the zoom lens is focused at infinity on the enlarging side.

11. (canceled)

12. (original) A projection display device comprising:

the zoom lens of claim 8;

a light source on the reducing side of the zoom lens; and

a light modulator positioned between the light source and the zoom lens for modulating light from the light source with image information;

wherein

the zoom lens projects the modulated light so as to form an enlarged image on the enlarging side of the zoom lens.

13. (original) A projection display device comprising:

the zoom lens of claim 9;

a light source on the reducing side of the zoom lens; and

a light modulator positioned between the light source and the zoom lens for modulating light from the light source with image information;

wherein

the zoom lens projects the modulated light so as to form an enlarged image on the enlarging side of the zoom lens.

14. (original) A projection display device comprising:

the zoom lens of claim 10;

a light source on the reducing side of the zoom lens; and

a light modulator positioned between the light source and the zoom lens for modulating light from the light source with image information;

wherein

the zoom lens projects the modulated light so as to form an enlarged image on the enlarging side of the zoom lens.